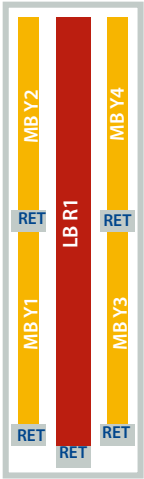
P6BPMU01

10-Port, 65 Degree, Base Station Sector Antenna

Kaelus Next Generation Base Station Antennas

- Innovative slotted disc antenna technology
- High gain over an extended tilt range
- Fully integrated Remote Electrical Tilt, AISG compatible
- Supports MIMO: 2x2 on Low Band and 4x4 on Mid Band

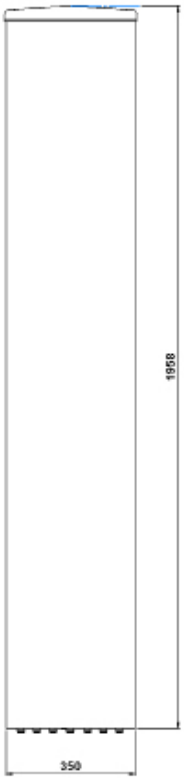


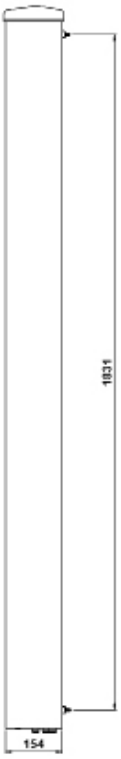
GENERAL	LB R1	MB Y1	MB Y2	MB Y3	MB Y4
Frequency Range	694-960	1695-2690	1695-2690	1695-2690	1695-2690
Gain Over All Tilts [dBi]	16.1	15.7	15.0	15.7	15.0
Polarization	X	X	X	X	X
Azimuth Beamwidth [º]	65	65	65	65	65
Electrical Downtilt Range [º]	2-12	2-12	2-12	2-12	2-12
Ports Per Band	2	2	2	2	2

Specifications and Layouts

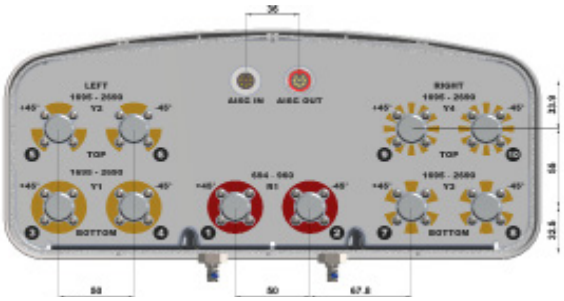
MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [inch|mm]	77.1x13.8x6.1 | 1958x350x154
Net Weight (Antenna) [lbs|kg]	61.7 | 28
Connector Type	4.3-10 Female
Connector Quantity	10
Connector Position	Bottom
Windload, Calculation* [mph|km/h]	124 | 200
Windload, Frontal [lbf|N]	179.4 | 798
Windload, Lateral [lbf|N]	31.2 | 139
Survival Wind Speed [mph|km/h]	93.2 | 150
Radome Material	GRP
Radome Colour [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
Mech. Distance Between Mounting Points - Antenna [inch|mm]	72.1 | 1831
Lightning Protection	DC Ground

** According to EN 1991-1-4:2005+A 1:2010*





REMOTE ELECTRICAL TILT (RET) INFORMATION	
Type	Integrated, Non-Removable
Power Input	10 - 30V DC
Protocol	3GPP/AISG2.0
RET Interface	8-Pin DIN
RET Interface (Quantity)	2 (1 Male + 1 Female)



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10-Port, 65 Degree, Base Station Sector Antenna

ELECTRICAL SPECIFICATIONS		LB R1			MB Y1/Y3					MB Y2/Y4				
Frequency Range [MHz]		694-790	790-862	880-960	1695-1880	1900-2025	2110-2170	2300-2500	2500-2690	1695-1880	1900-2025	2110-2170	2300-2500	2500-2690
Gain, Average [dBi]	**Min Tilt**	15.4	16.0	16.5	14.5	14.8	15.6	16.4	16.6	13.8	14.1	14.9	15.7	15.9
	Mid Tilt	15.6	16.2	16.7	14.7	15.0	15.8	16.6	16.8	14.0	14.3	15.1	15.9	16.1
	Max Tilt	15.4	16.0	16.5	14.5	14.8	15.6	16.4	16.6	13.8	14.1	14.9	15.7	15.9
Gain, Over All Tilts [dBi]		15.5 ±0.5	16.1 ±0.5	16.6 ±0.5	14.6 ±0.5	14.9 ±0.5	15.7 ±0.5	16.5 ±0.5	16.7 ±0.5	13.9 ±0.5	14.2 ±0.5	15.0 ±0.5	15.8 ±0.5	16.0 ±0.5
Azimuth Beamwidth [º]		69.0 ±3.0	66.0 ±3.0	63.0 ±2.0	66.0 ±6.0	68.0 ±4.0	64.0 ±3.0	61.0 ±4.0	59.0 ±3.0	66.0 ±6.0	68.0 ±4.0	64.0 ±3.0	61.0 ±4.0	59.0 ±3.0
Elevation Beamwidth [º]		12.0 ±1.0	10.8 ±0.6	9.4 ±0.6	10.8 ±0.5	10.4 ±0.5	9.3 ±0.5	8.3 ±0.5	7.6 ±0.5	10.8 ±0.5	10.4 ±0.5	9.3 ±0.5	8.3 ±0.5	7.6 ±0.5
Electrical Downtilt [º]		2-12			2x 2-12					2x 2-12				
Elevation Downtilt Deviation [º]		0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Front-to-Back Ratio, Total Power, ±30º [dB]		23	24	22	23	23	23	23	23	23	23	23	23	23
First Upper Side Lobe Suppression [dB]		16	17	17	17	17	17	17	17	17	17	17	17	17
Upper Side Lobe Suppression [dB]		15	15	15	15	15	15	15	10	15	15	15	15	10
Polarization [º]		±45			±45					±45				
Impedance [Ω]		50			50					50				
VSWR		< 1.5:1			< 1.5:1					< 1.5:1				
Return Loss [dB]		< -14.0			< -14.0					< -14.0				
Cross Polar Isolation [dB]		30			30					30				
Interband Isolation [dB]		35			35					35				
Passive Intermodulation [dBc]		< -153			< -153					< -153				
Maximum Effective Power Per Port [W]		350			350					350				

PRODUCT VARIANT	
Single RET Firmware Configuration	P6BPMU01-V1
Multi RET Firmware Configuration	P6BPMU01-V2

SHIPPING AND ORDER INFORMATION		
Packing Size: Length, Width, Depth [inch|mm]	89.8x19.7x11.8 | 2280x500x300	
No Bracket: Shipping Weight [lbs|kg], P/N	70 | 32	P6BPMU01-Vx-P1
Fixed Bracket: Shipping Weight [lbs|kg], P/N	77 | 35	P6BPMU01-Vx-P2
Tilt Bracket: Shipping Weight [lbs|kg], P/N	81 | 37	P6BPMU01-Vx-P3

ENVIRONMENTAL COMPLIANCE	
ETSI EN300019-1-1 for Storage	Class 1.2
ETSI EN300019-1-2 for Transportation	Class 2.3
ETSI EN300019-1-4 for Environmental Conditions	Class 4.1E
Cold Temperature Survival [ºF |ºC]	-40 | -40
Hot Temperature Survival [ºF |ºC]	140 | 60

Network planning files and datasheet in NGMN XML formats are available on request by email.

Kaelus follows the definitions and recommendations per NGMN P-Basta version 11.1 (www.ngmn.org) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit www.kaelus.com for the most current data sheets.

Revised: 4 November 2020